



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,126	10/12/2001	Scott T. Millward	10017266-1	2413

7590 04/07/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.o. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

SURYAWANSHI, SURESH

ART UNIT	PAPER NUMBER
----------	--------------

2115

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/977,126	Applicant(s) MILLWARD ET AL.	
	Examiner Suresh K Suryawanshi	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2115

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Drawings

2. This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

Claim Objections

3. Claim 2 is objected to because of the following informalities: symbol “,” should have been “.” as a claim should be ended with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US Patent No 6,112,301) in view of Hanson (US Patent No 6,148,346).

6. As per claim 1, Johnson discloses

booting an operating system having a plurality of tunable kernel subsystems [Fig. 3; col. 2, line 62 -- col. 3, line 3; col. 5, lines 35-37; col. 6, lines 63-67; col. 7, lines 4-9, 25-30; col. 8, lines 21-26; operating system having a plurality of tunable parameters];

storing a representation of at least one base tunable having a set of inheritable properties in a memory of the computer [Fig. 3; col. 2, line 62 -- col. 3, line 3; col. 7, lines 4-9, 25-30; col. 8, lines 21-26; at least one tunable functional sub-system of the operating system is being stored in the system's memory].

Johnson clearly discloses systems and techniques for customizing and/or tuning operating systems for computing systems and the like. Johnson does not disclose the use of an objected

Art Unit: 2115

oriented programming to implement the systems and techniques. However, Hanson expressly discloses the use of an object oriented programming to provide improved device drivers for dynamic connection of peripheral devices. Hanson clearly discloses storing, in a memory of the computer, a plurality of representation of instances of at least one of the stored base class [col. 3, lines 42-67; numerous instances of the class], each instance including at least one inheritable property of the stored base class [col. 3, lines 42-67; an instance inherits all the methods of its class], wherein representations of at least a first instance and a second instance are stored at different memory addresses [col. 3, lines 42-67; each instance has its own physical location in memory], the first instance and the second instance comprise structures including a plurality of values [col. 3, lines 42-67; an instance is a specific object with the behaviors defined by its class], and the first instance and the second instance differ in at least one corresponding said value [col. 3, lines 42-67; each instance has particular individual values associated with it that are unique]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

7. As per claim 9, Johnson discloses

boot an operating system having a plurality of tunable kernel subsystems [Fig. 3; col. 2, line 62 -- col. 3, line 3; col. 5, lines 35-37; col. 6, lines 63-67; col. 7, lines 4-9, 25-30; col. 8, lines 21-26; operating system having a plurality of tunable parameters];

store a representation of at least one base tunable having inheritable properties in the memory of the computing apparatus [Fig. 3; col. 2, line 62 -- col. 3, line 3; col. 7, lines 4-9, 25-30; col. 8, lines 21-26; at least one tunable functional sub-system of the operating system is being stored in the system's memory].

Johnson clearly discloses systems and techniques for customizing and/or tuning operating systems for computing systems and the like. Johnson does not disclose the use of an objected oriented programming to implement the systems and techniques. However, Hanson expressly discloses the use of an object oriented programming to provide improved device drivers for dynamic connection of peripheral devices. However, Hanson expressly discloses storing, in a memory of the computing apparatus, a plurality of representations of instances of at least one said stored base class [col. 3, lines 42-67; numerous instances of the class], each said instance including at least one inheritable property of said stored base class [col. 3, lines 42-67; an instance inherits all the methods of its class], wherein representations of at least a first said instance and a second said instance are stored at different addresses in memory [col. 3, lines 42-67; each instance has its own physical location in memory], said first instance and said second

Art Unit: 2115

instance comprise structures including a plurality of values [col. 3, lines 42-67; an instance is a specific object with the behaviors defined by its class], and said first instance and said second instance differ in at least one corresponding said value [col. 3, lines 42-67; each instance has particular individual values associated with it that are unique]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

8. As per claim 15, Johnson discloses

store a representation of at least one base tunable having inheritable properties in the memory of the computing apparatus [Fig. 3; col. 2, line 62 -- col. 3, line 3; col. 7, lines 4-9, 25-30; col. 8, lines 21-26; at least one tunable functional sub-system of the operating system is being stored in the system's memory]; and

Johnson clearly discloses systems and techniques for customizing and/or tuning operating systems for computing systems and the like. Johnson does not disclose the use of an objected oriented programming to implement the systems and techniques. However, Hanson expressly discloses the use of an object oriented programming to provide improved device drivers for

Art Unit: 2115

dynamic connection of peripheral devices. However, Hanson expressly discloses storing, in a memory of the computing apparatus, a plurality of representations of instances of at least one said stored base class [col. 3, lines 42-67; numerous instances of the class], each said instance including at least one inheritable property of said stored base class [col. 3, lines 42-67; an instance inherits all the methods of its class], wherein representations of at least a first said instance and a second said instance are stored at different address in memory [col. 3, lines 42-67; each instance has its own physical location in memory], said first instance and said second instance comprise structures including a plurality of values [col. 3, lines 42-67; an instance is a specific object with the behaviors defined by its class], and said first instance and said second instance differ in at least one corresponding said value [col. 3, lines 42-67; each instance has particular individual values associated with it that are unique]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

9. As per claims 2, 10 and Johnson discloses the invention substantially. Johnson does not disclose about instance creation. However, Hanson expressly discloses about instance creation [col. 3, lines 42-67]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the

Art Unit: 2115

problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

10. As per claims 3, 7, 17 and 20, Johnson discloses the invention substantially. Johnson does not disclose about deallocating at least one of the first instance of the base tunable. However, Hanson expressly discloses about instance creation and memory management by allocating and deallocating is a must in object-oriented programming [col. 3, lines 42-67; use of constructors and destructors]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

11. As per claims 4, Johnson discloses the invention substantially. Johnson does not disclose about writing data indicative of the identity of said one of the base tunables into said first instance data structure and said second instance data structure. However, Hanson expressly discloses about instance creation [col. 3, lines 42-67; numerous instances of a class]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2115

to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

12. As per claims 5, 6, 11, 13, 18 and 19, Johnson discloses the invention substantially. Johnson does not disclose about inheritable property. However, Hanson expressly discloses about instance creation and an instance inherits all the inheritable properties from its base class or object [col. 3, lines 42-67]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of customizing or tuning a computer system environment. Moreover, a routineer would like to use object oriented programming for implementation over non-object oriented programming to get the benefits of reusability, reliability, robustness, extensibility and maintainability.

Art Unit: 2115

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K Suryawanshi whose telephone number is 571-272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks

March 24, 2005



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100